

OUR BOOK SHELF.

Animals of No Importance. By D. Dewar. Pp. 113. (Calcutta and Simla : Thacker, Spink and Co.; London : W. Thacker, 1903.)

THE essays collected in this little volume have, with one exception (which made its appearance in the *Indian Daily Telegraph*), been previously before the public in the columns of the *Times of India*. Although his style is occasionally somewhat slangy, the author discourses in a pleasant and readable manner on the habits and mode of life of various living creatures commonly met with by the resident in India, inclusive of some of those to be seen on the voyage. Excluding all such animals as come under the denomination of game—whether great or small—he confines his attention to the less attractive, although in many cases by no means the less obtrusive, members of the animal world, and from this lowly aspect of his subject he has chosen the title of the volume.

As a rule, each of the various essays is devoted in the main to a particular species. One of the most amusing of the series treats of the Indian crow—the miscalled *Corvus splendens*—a bird which, despite its store of mischief, Mr. Dewar allows the possession of some redeeming traits. He can, however, scarcely find words to express his detestation of that noisome pest, the common fly—a detestation shared by all who have resided in the east. On the other hand, the spider is a creature for which the author expresses the greatest admiration, ranking its intellectual powers higher than those of ant, bee, or wasp.

Under the title of the "Malaria Middleman" will be found a good popular account of the manner in which the *Anopheles* mosquito conveys the malaria germ; although it would have been better had the use of "scientist" been avoided. To one sentence in another article, namely, that "dinosaurs and sea-serpents disported themselves in the ocean" (p. 62), we venture to take strong exception. Although, perhaps, one relating to the movements of the fins of flying-fishes is the only zoological observation of any importance, we may commend the work as an excellent practical example of "nature-teaching," and at the same time as showing how the enforced tedium and confinement of Indian hot-weather life may be mitigated by the intelligent observation of the ways of the uninvited denizens of the bungalow and its immediate surroundings.

R. L.

Farming. By W. M. Tod, M.A. With illustrations by Lucy Kemp-Welch. Haddon Hall Library. Pp. vi+268. (London : J. M. Dent and Co., 1903.) Price 7s. 6d.

THE Haddon Hall Library has hitherto dealt only with various branches of sport; its incursion into the serious domain of agriculture is therefore rather a novelty, but as Mr. Tod indicates in his opening chapter farming is something more than a business. There are probably few men who have not deep in them the desire to cultivate a plot of land or to breed some kind of animal; it is a form of atavism, civilised man gets his amusement from the pursuits out of which he dragged a hard living in the early world, and farming, like shooting and fishing, has long been the rich man's recreation. The professional can still make a living by it, but the amateur often finds his farm little less costly than his shoot. It would be hardly fair to Mr. Tod to say that his book is intended for the latter class of readers; clearly he has in mind the man to whom farming is bread and butter, but he is very sure that if the farmer sometimes finds the butter spread too thin he may look for abundant compensation in the pure joy of life on the land.

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Mr. Tod's book then differs from the ordinary textbook of agriculture in treating his subject from a somewhat more generalised and human point of view; he deals with the functions of the soil, the principles of tillage, manuring and cropping, live-stock, and the system on which a farm should be managed, without any elaboration of detail, but with an intelligent appreciation both of the scientific basis of agriculture and of the other considerations which must regulate its practice. Here and there his statements and recommendations are open to criticism; in a country so diversified as Great Britain, the routine of management must change with the shifting conditions of climate and soil, but in the main the book presents a very sound picture of the farming of the midlands and east of England. Mr. Tod's experience is sufficient guarantee that the book is practical; at the same time he is no blind follower of the old paths, but is insistent that agriculture, to be successful, must adapt itself to the altered state of our markets since the great tradition of British farming was established.

The book is clearly and enthusiastically written, and we can cordially recommend it either to the man who has a little place in the country and wants to do something more than blindly follow the lead of his bailiff, or to the general reader interested in the land and desirous of understanding its great industry. To the young landowner or to the boy who is anxious to take up farming as his walk in life the book will give an excellent picture of the work of a well managed farm, and will serve as an inspiring introduction to a more technical study of the subject. Like all the volumes of the Haddon Hall series, the book is charmingly produced, well printed on good paper, and with some illustrations by Miss Kemp-Welch which catch the true spirit of the English country-side.

A. D. H.

Queries in Ethnography. By Albert Galloway Keller, Ph.D. Pp. ix+77. (London : Longmans, Green and Co., 1903.) Price 2s. net.

DR. A. G. KELLER'S small book of questions in ethnography is intended for the use of the "intelligent and partially instructed layman." The specialist, he informs us, needs no such manual, and the utterly uninstructed are unfitted to use one with discrimination and result. We agree with him. The 912 questions comprise a very wide range of ethnographical inquiry under the following heads:—(1) maintenance; (2) perpetuation; (3) gratification; (4) religious and superstitious ideas and usages; (5) the societal system; (6) contact and modification.

The system followed has been that developed by Prof. Sumner, of Yale University, and the questions evidently are based also on the admirable "Notes and Queries on Anthropology" edited by Dr. J. G. Garson and Mr. C. H. Read, and on the set of questions issued by Dr. J. G. Frazer. Not one of these books has been written by a field ethnologist, and it is perhaps doubtful whether a field ethnologist would write such a book, as the answers given to such questions by the collector are apt to be snappy, and, with the view of answering the question succinctly, he would be inclined to leave out other descriptive matter which did not appear to be relative to the particular question, but which might be, nevertheless, of supreme importance. Dr. Keller asks "exactly what is meant by 'father,' 'brother,' 'son,' if they do not correspond to our own terms?" This sort of questioning is of little real value; the only satisfactory method is the genealogical one devised by Dr. Rivers (*Journ. Anthropol. Inst.*, vol. xxx. p. 74, 1900). Nothing is said about the value of obtaining information concerning different schools of decorative art and the significance of the designs.

Doubtless Dr. Keller's little book will prove of con-

siderable service. Practically all one can say to a traveller is that he should collect full information about everything, and books of this kind are valuable in suggesting topics for inquiry.

Catalogue of the Lepidoptera Phalaenae in the British Museum. Vol. iv. Catalogue of the Noctuidæ in the Collection of the British Museum. By Sir George F. Hampson, Bart. Pp. xx+689, plates lv.-lxxvii., and 125 woodcuts. (London: Printed by Order of the Trustees.) Price 15s.; plates 16s.

THE previous volumes of this important work appeared in 1898, 1900, and 1901 respectively, and we have now to record the publication of vol. iv., which includes the Agrotinæ, the first of the fifteen subfamilies into which the great family of Noctuidæ is divided; 1139 Agrotinæ are described in the present volume, out of the 10,000 to 12,000 known species of Noctuidæ.

As the Agrotinæ are well represented in Europe and North America, this volume will perhaps appeal to a larger number of lepidopterists than its predecessors, which treated of more showy, but principally tropical, moths. For the plates of Agrotinæ trichromatic photography has been employed, as more suitable to represent the generally dull colours of the Noctuidæ than chromolithography, which is considered better adapted to bright coloured moths, such as Arctiadæ.

Most of the leading lepidopterists of Europe and America have helped to make Sir George Hampson's work more complete by the contribution of specimens, or coloured photographs of unique types, and the loan of co-types.

Descriptions of the known larvæ of Agrotinæ are added from various authentic sources, those of North American species being mostly contributed by Dr. Harrison G. Dyar.

The general arrangement of the book is in all respects similar to that of previous volumes, and the execution of the plates is excellent, though one or two figures may perhaps be somewhat undercoloured—not a very serious point, however.

There are small matters on which we think information, when attainable, might have been added, such as the elevations between which mountain species occur (which is only rarely mentioned) and the latitudes at which Arctic species have been found.

As we may reasonably assume that the increase of our knowledge of moths will be still more rapid in the future than it has been in the past, we can hardly expect Sir George Hampson to complete the Noctuidæ in less than ten or twelve volumes. At a rough estimate it is probable that out of the 1139 species described in vol. iv. less than 300 may have been included in Walker's catalogue of 1856-1866. Rather more than 100 species of Agrotinæ have been described by Sir George himself, either for the first time in the present volume, or in previous publications.

Proceedings of the London Mathematical Society. Vol. xxxv. Pp. 476. (London: Francis Hodgson, 1903.)

A SPECIAL interest attaches to the present volume from the fact that it marks the retirement from the secretaryship of Mr. R. Tucker after thirty-five years of office. Mr. Tucker was elected a member of the Society on October 16, 1865, and two years later he succeeded G. C. de Morgan as secretary. Mr. Tucker has been responsible for the greater part of the editorial duties connected with the issue of the *Proceedings* from part xii. onwards, and he has succeeded in producing a series of English mathematical transactions of which he may well feel proud.

Among the subjects treated in this volume we note Dr. Hobson's presidential address on the infinite and

the infinitesimal in mathematical analysis, and papers by Mr. Conway on light propagation in a uniaxial crystal, by Prof. A. C. Dixon on summation of series and expansion of functions, by Prof. Hill on power series, by Prof. Lamb on wave motions, by M. Picard on existence theorems for differential equations (in French), by Mr. Whittaker on harmonic analyses, by Mr. W. H. Young on sets of points and intervals, and many other papers of equal interest.

Insist on Yourself. The only Law of Success. Pp. 45. (London: Gay and Bird, n.d.) Price 1s. net.

THIS little book is intended to set forth concisely many of Emerson's utterances on the importance and power of individuality. The "thoughts" selected are attractively arranged and nicely printed.

LETTERS TO THE EDITOR.

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The Unusual Sky Colours and the Atmospheric Circulation.

PROF. F. A. FOREL writes me concerning my letter in vol. lxviii. p. 623, that although he did not himself observe the coloured ring around the sun prior to the first of last August, yet he has been informed that it was seen in Europe much earlier. The observers and dates quoted by M. Forel, arranged by localities from north to south, are as follows:—Director Rykatcheff, of the Central Physical Observatory at St. Petersburg, noted an opalescent veil surrounding the sun on October 5 and November 9, 1902, January 21, February 10, 18 and 23, March 17, April 5, May 29, and July 26, 1903. Dr. Busch, at Arnsberg, Westphalia, saw the same thing on November 19, 1902, March 21 and 22, 1903, and Prof. Wolf, at Heidelberg, during January, 1903. Dr. Maurer, at Zurich, observed the ring also in January, on March 27 and 28, June 7, 8, 9, and at the end of July, 1903. Therefore, M. Forel says, very properly, that since the phenomenon was observed practically simultaneously in Europe and America, no hypothesis as to why it appeared first in the last named country is needed. While admitting the truth of the statement, I would remark that a faint whitish ring around the sun was recorded by me here as early as June 26, 1902, although it was not noticed again until the close of the year. The equally early appearance over southern England of a large brownish corona, which became smaller but more conspicuous during the summer and autumn of 1902, is described by Mr. T. W. Backhouse in NATURE (vol. lxvii. p. 174).

M. Forel pointed out in the *Comptes rendus* of the French Academy of Sciences for August 10 that in view of the intermittent character of the brilliant colours of the western sky after sunset during the preceding year, produced, he assumed, by the breaking up of the continuous ring of volcanic dust into separate cloud masses which passed successively over Europe, it became of interest to ascertain whether the present Bishop's ring, unlike its predecessor, was always visible in favourable circumstances. The data mentioned, as subsequently sent M. Forel, proved that the new Bishop's ring was visible only at irregular intervals, as he had surmised. Now, if this phenomenon, as well as the discontinuous sunset glows, were caused by the passage of isolated masses of volcanic dust, it seems possible, by comparisons with observations at distant stations, not only to trace the direction of their drift, but also to determine their approximate velocity. Accordingly, the records at Blue Hill of the occurrence of Bishop's ring and of abnormal glows after sunset during the past year were examined, and the tendency of both phenomena to occur intermittently, but not necessarily simultaneously, was established, even though the transparency of air remained nearly constant.